

HUBBLE SPACE TELESCOPE  
SECOND SERVICING MISSION  
OPERATIONS TEST PLAN

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GODDARD SPACE FLIGHT CENTER  
GREENBELT, MARYLAND

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ACRONYMS

<b>ACP</b>	<b>Alternate Command Plan</b>
AEDP	Astrometry and Engineering Data Processor
AFD	AFT Flight Deck
<b>AMA</b>	<b>Actuator Mechanism Assembly</b>
<b>AMS</b>	<b>Actuator Mechanism Subsystem</b>
AP	Applications Processor
AT	Aliveness Test
ATSC	Allied Signal Technical Services Corporation
BASD	Ball Aero Space Division
<b>BAT</b>	<b>Battery</b>
bps	bits per second
BRZ	BESST Release Zero
<b>BTE</b>	<b>Bench Test Equipment</b>
C&T	Communication and Test
CAS	Calibrated Ancillary System
CCB	Configuration Control Board
<b>CCC</b>	<b>Charge Current Controller</b>
CCD	Charged Couple Device
<b>CCU</b>	<b>Central Control Unit</b>
<b>CDI</b>	<b>Command Data Interface</b>
<b>CDS</b>	<b>Central Data System</b>
CITE	Cargo Interrogation Test Equipment
CMD	Command
COMM	Communications
COP	80386 Coprocessor
COSTAR	Corrective Optics Space Telescope Axial Replacement
CSR	Customer Support Run
<b>CSS</b>	<b>Course Sun Sensor</b>
CTA	Computer Technology Associates, Inc.

ACRONYMS (Continued)

<b>DAU</b>	<b>Data Management Unit</b>
<b>DBC</b>	<b>Data Base Case</b>
<b>DC</b>	<b>Direct Current</b>
<b>DCE</b>	<b>Deployment Control Electronics</b>
<b>DCF</b>	Data Capture Facility
<b>DDF</b>	<b>Data Distribution Facility</b>
<b>DEL</b>	Data Evaluation Lab
<b>DF-224</b>	Rockwell digital 2's complement 24-bit computer
<b>DIG</b>	<b>Digital</b>
<b>DIU</b>	Data Interface Unit
<b>DMS</b>	<b>Data Management System</b>
<b>DOC</b>	Data Operations Center
<b>DSID</b>	<b>Data Stream ID</b>
<b>DSN</b>	Deep Space Network
<b>DSU</b>	<b>Dual Servo Unit (Part of FGE/ORU)</b>
<b>ECU</b>	<b>Electronics Control Unit</b>
<b>EDB</b>	Engineering Data Blocks
<b>EK</b>	<b>Enhancement Kit</b>
<b>ENG</b>	Engineering
<b>EP</b>	<b>Electrical Power</b>
<b>EPS</b>	<b>Electrical Power System</b>
<b>EPTCE</b>	<b>Electrical Power and Thermal Control Electronics</b>
<b>ESS</b>	Engineering Support System
<b>ESTL</b>	Electrical System Test Laboratory
<b>ESTR</b>	<b>Engineering Science Tape Recorder</b>
<b>ETE</b>	End-to-End
<b>ETR</b>	Engineering Tape Recorder
<b>ETU</b>	<b>Engineering Test Unit</b>
<b>EVA</b>	<b>Extra-Vehicular Activity</b>

ACRONYMS (Continued)

FS&S	Flight Systems and Servicing
FDF	Flight Dynamics Facility
<b>FF</b>	<b>Flat Fold</b>
<b>FGE</b>	<b>Fine Guidance Electronics</b>
<b>FGS</b>	<b>Fine Guidance Sensor</b>
FOC	Faint Object Camera
FOS	Faint Object Spectrograph
FOT	Flight Operations Team
FSM	First Servicing Mission
FT	Functional Test
GAR	Goddard Amplifier Rack
GHRS	Goddard High Resolution Spectrograph
GN	Ground Network
GSE	Ground Support Equipment
GSFC	Goddard Space Flight Center
<b>H/W</b>	<b>Hardware</b>
<b>HARS</b>	<b>HST Anomaly Report System</b>
<b>HDA</b>	<b>Hubble Data Archive</b>
<b>HDOS</b>	<b>Hughes Danbury Optical Systems</b>
<b>HGA</b>	<b>High Gain Antenna</b>
<b>HLD</b>	<b>High Level Discrete (Command Type)</b>
HSIF	Hardware/Software Integration Facility
HST	Hubble Space Telescope
<b>HSTARS</b>	<b>Hubble Space Telescope Anomaly Reporting System</b>
HSTOMS	Hubble Space Telescope Observatory Management System
<b>I&amp;C</b>	<b>Instrumentation and communication</b>
I&T	Integration and Test
<b>I/F</b>	<b>Interface</b>
<b>ICLU</b>	<b>Interbuilding Communications Link Upgrade</b>
IDT	Instrument Development Team

ACRONYMS (Continued)

IM	Instruction Manager
IPA	Interface Performance Activity
ITAV	Independent Test and Verification
<b>ITS</b>	<b>Internal Test Source</b>
JIS	Joint Integrated Simulation
<b>JPL</b>	<b>Jet Propulsion Lab</b>
JSC	Johnson Space Center
Kbps	Kilobits per second
KSC	Kennedy Space Center
LCC	Launch Control Center
<b>LMTO</b>	<b>Lockheed Martin Technical Operations</b>
<b>LORAL</b>	<b>HST Contractor (was FACC)</b>
LSR	Launch Support Room
<b>MAMA</b>	<b>Multi-Anode, Microchannel-plate Array</b>
<b>MASIS</b>	<b>Monitor and Science Instrument(s) Simulator</b>
MB	Megabyte
MCC	Mission Control Center
<b>MCU</b>	<b>Mechanisms Control Unit</b>
<b>MEGG</b>	<b>Mission Elapsed Graphic Generator</b>
MIL	Merritt Island Launch Annex (3 letter designation)
MILA	Merritt Island Launch Annex
MOC	Mission Operations Contractor
MOR	Mission Operations Room
MOSES	Mission Operations Software Engineering Support
MRS	MILA Relay System
MRT	Mission Readiness Testing
MSOCC	MultiSatellite Operations Control Center

ACRONYMS (Continued)

<b>MSS</b>	<b>Magnetic Sensing System</b>
<b>MTS</b>	<b>Magnetic Torquing System</b>
<b>MVIP</b>	Micro Virtual Interface Processor
<b>NASA</b>	National Aeronautics and Space Administration
<b>NASCOM</b>	NASA Communications
<b>NICMOS</b>	Near Infrared Camera Multiple Object Spectrometer
<b>NSSC</b>	NASA Standard Spacecraft Computer
<b>NTTF</b>	Network Testing/Training Facility
<b>O&amp;GS</b>	Operations and Ground Systems
<b>OBC</b>	<b>On-board Computer</b>
<b>OCE</b>	<b>Optical Control Electronics</b>
<b>OCE EK</b>	<b>Optical Control Electronics Enhancement Kit</b>
<b>OCXO</b>	<b>Oven Controlled Crystal Oscillator</b>
<b>OMI</b>	Operations and Maintenance Instructions
<b>OPF</b>	Orbiter Processing Facility
<b>OPUS</b>	<b>OSS/PODPS Unified System</b>
<b>ORI</b>	Orbital Replacement Instrument
<b>ORU</b>	Orbital Replacement Unit
<b>OSC</b>	<b>Oscillator</b>
<b>OSS</b>	<b>Observation Support System</b>
<b>OST</b>	<b>Operations Support Team</b>
<b>OTA</b>	<b>Optical Telescope Assembly</b>
<b>OTWG</b>	Operations Testing Working Group
<b>PACOR II</b>	Packet Processor
<b>PASS</b>	POCC Application Software Support
<b>PASSOPS</b>	PASS Operations
<b>PB</b>	<b>Payload Bay</b>
<b>PCS</b>	<b>Pointing Control System</b>

ACRONYMS (Continued)

<b>PCU</b>	<b>Power Control Unit</b>
PDB	Project Data Base
<b>PDF</b>	<b>Programmable Data Formatter</b>
PDT	Performance Demonstration Test
<b>PDU</b>	<b>Power Distribution Unit</b>
<b>PEP</b>	<b>Proposal Entry Processor</b>
PEPSI	Proposal Entry Processing Subsystem
PGSC	Payload and General Support Computer
<b>PHE</b>	<b>POCC Hazardous Enhancement</b>
PI	Payload Interrogator
PIT	Processor Interface Table
<b>PMT</b>	<b>Photo multiplier Tube</b>
POCC	Payload Operations Control Center
PODPS	Post Observation Data Processing System
PORTS	Preliminary Operations Requirements and Test Support
<b>PPF</b>	<b>Payload Parameter Frame</b>
PPF	Payload Processing Facility
PRS	PORTS Refurbishment System
<b>PSEA</b>	<b>Pointing Control and Safemode Electronics Assembly</b>
PSP	Program Signal Processor
PSS	Portable Spacecraft Simulator
<b>RF/DIG</b>	<b>RF Digital Console</b>
R/T	Real Time
<b>RBM</b>	<b>Radial Bay Module</b>
<b>REC</b>	<b>Record</b>
RF	Radio Frequency
<b>RGA</b>	<b>Rate Gyro Assembly (consists of one RATE SENSING UNIT (RSU) and one ECU)</b>
<b>RGAI</b>	<b>Rate Gyro Assembly Interface (Module in DMU)</b>
RIU	Remote Interface Unit

ACRONYMS (Continued)

<b>RPSS</b>	Remote Proposal Submission System
<b>RSU</b>	<b>Rate Sensing Unit</b>
<b>RT</b>	<b>Real Time</b>
<b>RTC</b>	<b>Realtime Command</b>
<b>RWA</b>	<b>Reaction Wheel Assembly</b>
<b>S/D</b>	<b>Serial Digital Input Channel Selection</b>
<b>S/W</b>	Software
<b>SA</b>	<b>Solar Array</b>
<b>SADE</b>	<b>Solar Array Drive Electronics</b>
<b>SADIST</b>	<b>Solar Array Drive Interface and Simulator Tester</b>
<b>SAIL</b>	Shuttle Avionics Integration Lab
<b>SAMS</b>	Support and Maintenance System
<b>SAPC</b>	<b>Solar Array Power Console</b>
<b>SD</b>	<b>Science Data</b>
<b>SDPF</b>	Science Data Processing Facility
<b>SDSS</b>	<b>Science Data Support System (now VSTIF)</b>
<b>SE</b>	Systems Engineering
<b>SEER</b>	Systems Engineering Evaluation Room
<b>SI</b>	Science Instrument
<b>SI C&amp;DH</b>	SI Control and Data Handling
<b>SIMESTR</b>	<b>Simulated Engineering and Science Tape Recorder Simulations</b>
<b>SM</b>	Servicing Mission
<b>SM2</b>	Second Servicing Mission
<b>SMAC</b>	Safing Macro
<b>SMDB</b>	Servicing Mission Data Base
<b>SMGT</b>	Servicing Mission Ground Test
<b>SMIT</b>	Servicing Mission Integrated Timeline
<b>SMOM</b>	SM Operations Manager
<b>SMOR</b>	<b>SM Operations Room</b>
<b>SMOV</b>	Servicing Mission Observatory Verification

ACRONYMS (Continued)

SMPART	Servicing Mission Planning and Replanning Tool
SMS	Science Mission Specification
SMSE	Servicing Mission System Engineer
SN	Space Network
SNOM	Space Network Operations Manager
SOC	Simulation Operations Center
<b>SOS</b>	<b>S-curve Optimization Software</b>
SPIF	Shuttle POCC Interface Facility
SPSS	Science Planning and Scheduling System
SSE	Space Support Equipment
SSM	Support Systems Module
<b>SSR</b>	<b>Solid State Recorder</b>
<b>SSS</b>	<b>Star Selector Servo</b>
STDN	Spacecraft Tracking and Data Network
STFS	ST flight software
STGT	Space Telescope Ground Terminal
STIS	Space Telescope Imaging Spectrograph
STOCC	ST Operations Control Center
STR	Science Tape Recorder
ST Sci	Space Telescope Science Institute
SVG	System Verification Group
<b>TALOS</b>	<b>Telemetry Analysis and Logic for Operations Support</b>
TAV	Test and Verification
TBD	To Be Determined
<b>TBR</b>	<b>To Be Resolved</b>
<b>TCE</b>	<b>Thermal Control Electronics</b>
TDRS	Tracking and Data Relay Satellite
TDRSS	TDRS System

ACRONYMS (Continued)

TLM	Telemetry
TMS	Thermal Monitoring System
TRANS	Transformation Subsystem (TRANS)
TRR	Test Readiness Review
TSAR	Test/Simulation Anomaly Report
TTAC	Transportable Telemetry and Command Processor
<b>TTL</b>	<b>Transistor-Transistor Logic</b>
<b>UT</b>	<b>Unit Tester</b>
<b>VAX4000</b>	<b>DEC Computer Model 4000</b>
<b>VAX8820</b>	<b>DEC Computer Model 8820</b>
<b>VBS</b>	<b>VEST Battery Simulator</b>
VEST	Vehicle Electrical Systems Test
<b>VPCC</b>	<b>Vehicle Power Processor Console</b>
VPF	Vertical Processing Facility
<b>VSTIF</b>	<b>VEST Software Test and Integration Facility</b>
<b>WBTR</b>	<b>Wide Band Tape Recorder</b>
WFPC-2	Wide Field Planetary Camera-2